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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/698,149 10/30/00 YEUNG

D APV 30271CIP

IM52/1023  
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WASHINGTON DC 20036

EXAMINER

ASINOVSKY, O

ART UNIT

PAPER NUMBER

1711

DATE MAILED:

10/23/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
**09/698,149**

Applicant(s)

**Yeung et al**

Examiner

**Olga Asinovsky**

Art Unit

**1711**



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on election/amendment and remarks of 09/19/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above, claim(s) 20, 21, and 25-47 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 and 22-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some\* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 4
- 18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's election of Group I with traverse in Paper No. 6 is acknowledged.

Applicants select the species with traverse for the block polymer formed from nitrogen-containing units and hydroxyl-containing monomeric units in the block polymer of the formula in claim 10; for nitrogen-containing cationic units of the formula in claim 9; and a terpolymer including monomeric units A, B and C in claim 12, wherein unit A is nitrogen-containing monomeric units, unit B is hydroxyl-containing monomeric units and unit C is (meth)acrylic acid monomeric unit. All three species are readable in claims 12 and 23. Claims 1-19 22-24 are searched together.

In light of the discussion in paragraph above it is seen that applicants have provided no objective evidence to overcome the restriction requirement between Group I and Groups II-X. Therefore, claims 20-21 25-47 are withdrawn from further consideration as being drawn to a nonelected invention and/or species.

The requirement is still deemed proper and therefore made FINAL.

### ***Claim Rejections - 35 USC § 102 or 103***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-19 and 22-24 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over McCall U.S. Patent 5,277,899 or Li et al U.S. Patent 5,580,819.

McCall discloses a composition comprising a terpolymer comprising three polymers (referring to as the monomers from which they can be derived), column 12, lines 22-30. The cationic monomers such as dimethylaminoethyl (meth)acrylate (DMAM) is the applicants' claimed cationic monomer unit A, column 12, lines 58-59. The anionic monomers such as hydroxyethyl (meth)acrylate (HEA or HEMA) and unsaturated (meth)acrylic acid monomeric units are readable on the claimed monomeric units B and C in the present claims 12 and 23. McCall discloses that the preferred B monomers include a mixture of an acrylic acid and dimethylaminoethyl methacrylate, column 17, lines 5-8. Any combinations of monomeric units with or without

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additional hydrophobic and/or hydrophilic monomer units having low or high polarity, which can provide hair setting benefits, are acceptable for the formulation of a hair setting composition in McCall's invention, column 12, lines 7-21. The cationic monomer such as a dimethylaminoethyl (meth)acrylate can be present in the amount of up to about 98% of the total monomers in the copolymer, column 16, line 35. The claimed block copolymer is readable in McCall's invention.

Li discloses a coating composition including an organic polymer, claim 12 at column 24. An organic polymer includes hydroxyalkyl (meth)acrylate, (meth)acrylic acid and amino alkyl methacrylates, column 2 line 60 through column 3, line 4. The monomer unit of 2-(dimethylamino)ethyl methacrylate is the applicants' claimed unit A. The monomer unit of 2-hydroxyethyl acrylate is the applicants' claimed unit B. The monomer unit of (meth)acrylic acid is applicants' claimed unit C, column 12, example 1. Li discloses a process for producing an organic polymer wherein the components are charged into the reactor vessel in a continuous manner, column 13, lines 15-18. Therefore, the recited monomers are polymerized for producing a specified block polymer. The obtained film forming polymer has a number average molecular weight of between about 500 and about 1,000,000, column 5, lines 34-36.

References do not positively disclose a cationic charge density of about 0.15 or less.

It is reasonable to presume that this property would possess the same characteristic in the composition in McCall's invention or Li's invention. It is a burden on the applicants to provide the difference in order to overcome this rejection under *In re Fitzgerald* 205 USPQ 594. A pH and a

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molecular weight of a block polymer is either met by the references or rendered prima facie obvious in view of the identical block polymer units formulation.

4 The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art is relevant to show the state of the art knowledge. The closest reference to McCall' 5,277,899 has been discussed above.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Olga Asinovsky whose telephone number is (703) 308-0041. The examiner can normally be reached on Monday to Friday from 8:30am to 5:00pm.

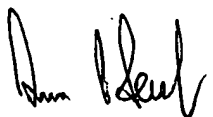
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck, can be reached on (703) 308-2462. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

O.A.

O.A.

October 18, 2001

  
James J. Seidleck  
Supervisory Patent Examiner  
Technology Center 1700